

Mr. Kevin R. Rudduck  
Chief Engineer  
Newport Chemical Depot  
P.O. Box 160  
Newport, Indiana 47966-0160

Re: 165-11541  
Third Significant Revision to  
FESOP 165-5470-00003

Dear Mr. Rudduck:

Newport Chemical Depot was issued a permit on December 11, 1996 for the operations at the Newport Chemical Depot (NECD). A letter requesting changes to this permit, due to equipment currently in operation and was not permitted previously, was received on November 12, 1999. Pursuant to the provisions of 326 IAC 2-8-11.1 a significant permit revision to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of adding the following:

- (a) two (2) gasoline fired generators, identified as NS-GN-4 and NS-GN-5, each rated at 20 horsepower (hp), and each exhausting at one (1) stack, identified as S/V 80 and S/V 81, respectively;
- (b) three (3) gasoline engine powered welders, identified as NS-WEL-1, NS-WEL-2 and NS-WEL-3, each rated at 13 hp, 16 hp and 11 hp, respectively, and each exhausting at one (1) stack identified as S/V 82, S/V 83 and S/V 84, respectively;
- (c) one (1) gasoline fired air compressor, identified as NS-AC-2, rated at 10 hp, and exhausting at one (1) stack identified as S/V 85;
- (d) one (1) gasoline engine powered high-pressure washer, identified as NS-PW-1, rated at 16 hp, exhausting at one (1) stack identified as S/V 86;
- (e) one (1) diesel fired heater, rated at 0.406 million British thermal units (MMBtu) per hour, exhausting at one (1) stack, identified as S/V 87;
- (f) four (4) portable kerosene heaters, each rated at 0.189, 0.189, 0.149 and 0.162 MMBtu/hr, respectively, and each exhausting at one (1) stack, identified as S/V 88, S/V 89, S/V 90 and S/V 91, respectively;
- (g) three (3) propane heaters, each rated at 0.028, 0.095 and 0.095 MMBtu/hr, respectively, and each exhausting at one (1) stack, identified as S/V 92, S/V 93 and S/V 94, respectively; and
- (h) two (2) aboveground diesel fuel tanks, each with a storage capacity of 550 gallons and 300 gallons, respectively.

Pursuant to 326 IAC 2-8-11.1, this permit shall be revised by incorporating the significant permit revision into the permit. All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this modification and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Scott Pan, c/o OAM, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call at (800) 451-6027, press 0 and ask for Duane Van Laningham or extension (3-6878), or dial (973) 575-2555, extension 3248.

Sincerely,

Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Management

Attachments  
SCP/EVP

cc: File - Vermillion County  
U.S. EPA, Region V  
Air Compliance Section Inspector - Eric Courtright  
Compliance Data Section - Karen Nowak  
Administrative and Development - Janet Mobley  
Technical Support and Modeling - Michele Boner

**FEDERALLY ENFORCEABLE STATE  
OPERATING PERMIT (FESOP)  
OFFICE OF AIR MANAGEMENT**

**Newport Chemical Depot (NECD)  
Indiana State Road 63  
Newport, Indiana 47966-0121**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the facilities listed in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 and contains the conditions and provisions specified in 326 IAC 2-8 and 40 CFR Part 70.6 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments) and IC 13-15 and IC 13-17 (prior to July 1, 1996, IC 13-1-1-4 and IC 13-7-10).

Operation Permit No.: F165-5470-00003	
Original issued by Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date: December 11, 1996
Exemption: 165-8390	Issuance Date: July 1997
First Significant Revision: 165-9701	Issuance Date: October 7, 1998
First Minor Permit Revision: 165-10289	Issuance Date: April 23, 1999
Second Significant Permit Revision: 165-9659	Issuance Date: December 3, 1999
Third Significant Permit Revision: 165-11541	Pages Affected: 6, 7, 7b, 25k, 25l, 30c
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

- (k) The pollutant emitting activities related to the construction of the NECDF are as follows:
  - (1) operation of generators;
  - (2) operation of internal combustion (IC) engines; and
  - (3) miscellaneous construction related fugitive and non-fugitive insignificant activities.
- (l) One (1) non-emergency type gasoline generator, located in Building 718A and rated at 5 kilowatts (kW):
- (m) Eleven (11) gasoline pumps (internal combustion engines):
  - (1) three (3) pumps, located in Building 733K and each rated at 20 horsepower (HP);
  - (2) one (1) pump, located in Building 717A and rated at 20 HP;
  - (3) one (1) pump, located in Building 718A and rated at 20 HP;
  - (4) one (1) pump, located in Building 718A and rated at 12 HP;
  - (5) one (1) pump, located in Building 717A and rated at 10 HP;
  - (6) two (2) pumps, located in Building 718A and each rated at 8 HP;
  - (7) one (1) pump, located in Building 710 and rated at 7.5 HP; and
  - (8) one (1) pump, located in Building 725A and rated at 3 HP;
- (n) Five (5) maintenance units (internal combustion engines):
  - (1) three (3) gasoline fired engines, located in Building 718A and each rated at 5.5, 20 and 10 HP, respectively;
  - (2) one (1) diesel fired engine, located in Building 725A and rated at 65 HP; and
  - (3) one (1) gasoline fired engine, located in Building 725A and rated at 55 HP;
- (o) two (2) gasoline fired generators, identified as NS-GN-4 and NS-GN-5, each rated at 20 horsepower (hp), and each exhausting at one (1) stack, identified as S/V 80 and S/V 81, respectively;
- (p) three (3) gasoline engine powered welders, identified as NS-WEL-1, NS-WEL-2 and NS-WEL-3, each rated at 13 hp, 16 hp and 11 hp, respectively, and each exhausting at one (1) stack identified as S/V 82, S/V 83 and S/V 84, respectively;
- (q) one (1) gasoline fired air compressor, identified as NS-AC-2, rated at 10 hp, and exhausting at one (1) stack identified as S/V 85; and
- (r) one (1) gasoline engine powered high-pressure washer, identified as NS-PW-1, rated at 16 hp, exhausting at one (1) stack identified as S/V 86.

#### A.3 Insignificant Activities

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) one (1) natural gas fired boiler identified as Building 7700 Boiler rated at 2.51 million (MM) British thermal units per hr and using #2 fuel oil as a backup, exhausting at one (1) stack;
- (b) one (1) 1,000 gallon capacity diesel fuel underground storage tank (UST) identified as Tank #144, exhausting at one emission point;
- (c) one (1) 550 gallon capacity diesel fuel UST identified as Tank #6178, exhausting at one emission point;
- (d) two (2) walk-in paint booths exhausting at two emission points;

- (e) one (1) toxic monitoring lab (TML) with chemical usage, exhausting at one (1) stack;
- (f) one (1) 275 gallon capacity diesel fuel AST identified as Tank 733K, exhausting at one emission point;
- (g) one (1) 550 gallon capacity diesel fuel UST identified as Tank 3005, exhausting at one emission point;
- (h) one (1) 550 gallon capacity No. 2 fuel oil UST identified as Tank 7703-1, exhausting at one emission point;
- (i) four (4) cold cleaning degreasing units in Bldgs 716A & 717A, each building exhausting at one (1) stack respectively;
- (j) one (1) 18,000 gallon capacity propane AST identified as Propane Tank at Propane Station;
- (k) one (1) woodworking operation exhausting at one (1) emission point;
- (l) one (1) mobile abrasive blaster rated at 107.1 pounds blast media;
- (m) one (1) gasoline dispensing station with fuel dispensing of less than 1,300 gallons per day, exhausting at one emission point;
- (n) one (1) 10,000 gallon capacity gasoline UST, exhausting at one emission point.
- (o) additional miscellaneous insignificant activities as:
  - (1) boilers/heaters (excluding Building 7700);
  - (2) medical lab;
  - (3) wastewater treatment facility;
  - (4) combustion start-up;
  - (5) 10,000 gallon capacity diesel fuel storage tank;
  - (6) fire training activities;
  - (7) asbestos abatement projects;
  - (8) water treatment;
  - (9) toxic laundry;
  - (10) pesticides/herbicides;
  - (11) structural painting;
  - (12) welding;
  - (13) air conditioning & refrigeration units;
  - (14) fire suppression systems;
  - (15) road paving;
  - (16) fixed abrasive blaster;
  - (17) protective mask cleaning;
  - (18) weapons cleaning; and
  - (19) miscellaneous chemical usage; and
- (p) miscellaneous fugitive activities:
  - (1) landfills ;
  - (2) small arms firing;
  - (3) storage piles;
  - (4) road dust; and
  - (5) prairie burns, stated as up to 70 acres per year.

- (q) One (1) diesel storage tank, identified as Diesel Tank #1, with maximum storage capacity of 1,000 gallons; and
- (r) One (1) oxyacetylene and stick welding station, with maximum wire consumption rate of 2.01 pounds per hour.
- (s) Paved and unpaved roads and parking lots with public access;
- (t) Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process;
- (u) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment;
- (v) On-site fire and emergency response training approved by the department;
- (w) Emergency generators as follows:
  - (1) Gasoline generators not exceeding 110 horsepower;
  - (2) Diesel generators not exceeding 1600 horsepower;
  - (3) Natural gas turbines or reciprocating engines not exceeding 16,000 horsepower;
- (x) Stationary fire pumps;
- (y) Any unit emitting greater than 1 pound per day but less than 5 pounds per day or 1 tons per year of a single HAP;
- (z) Any unit emitting greater than 1 pound per day but less than 12.5 pounds per day of 2.5 tons per year of any combination of HAPs.
- (aa) Two (2) propane fired hot water heaters, each rated at 0.179 million British thermal units per hour (mmBtu/hr);
- (bb) One (1) diesel generator and one (1) air compressor, each rated at 5 HP;
- (cc) one (1) diesel fired heater, rated at 0.406 million British thermal units (MMBtu) per hour, exhausting at one (1) stack, identified as S/V 87;
- (dd) four (4) portable kerosene heaters, each rated at 0.189, 0.189, 0.149 and 0.162 MMBtu/hr, respectively, and each exhausting at one (1) stack, identified as S/V 88, S/V 89, S/V 90 and S/V 91, respectively;
- (ee) three (3) propane heaters, each rated at 0.028, 0.095 and 0.095 MMBtu/hr, respectively, and each exhausting at one (1) stack, identified as S/V 92, S/V 93 and S/V 94, respectively; and
- (ff) two (2) aboveground diesel fuel tanks, each with a storage capacity of 550 gallons and 300 gallons, respectively.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) for a Federally Enforceable State Operating Permit (FESOP).

## SECTION D.10 FACILITY OPERATION CONDITIONS

- (l) One (1) non-emergency type gasoline generator, located in Building 718A and rated at 5 kilowatts (kW):
  - (m) Eleven (11) gasoline pumps (internal combustion engines):
    - (1) three (3) pumps, located in Building 733K and each rated at 20 horsepower (HP);
    - (2) one (1) pump, located in Building 717A and rated at 20 HP;
    - (3) one (1) pump, located in Building 718A and rated at 20 HP;
    - (4) one (1) pump, located in Building 718A and rated at 12 HP;
    - (5) one (1) pump, located in Building 717A and rated at 10 HP;
    - (6) two (2) pumps, located in Building 718A and each rated at 8 HP;
    - (7) one (1) pump, located in Building 710 and rated at 7.5 HP; and
    - (8) one (1) pump, located in Building 725A and rated at 3 HP;
  - (n) Five (5) maintenance units (internal combustion engines):
    - (1) three (3) gasoline fired engines, located in Building 718A and each rated at 5.5, 20 and 10 HP, respectively;
    - (2) one (1) diesel fired engine, located in Building 725A and rated at 65 HP; and
    - (3) one (1) gasoline fired engine, located in Building 725A and rated at 55 HP.
  - (o) two (2) gasoline fired generators, identified as NS-GN-4 and NS-GN-5, each rated at 20 horsepower (hp), and each exhausting at one (1) stack, identified as S/V 80 and S/V 81, respectively;
  - (p) three (3) gasoline engine powered welders, identified as NS-WEL-1, NS-WEL-2 and NS-WEL-3, each rated at 13 hp, 16 hp and 11 hp, respectively, and each exhausting at one (1) stack identified as S/V 82, S/V 83 and S/V 84, respectively;
  - (q) one (1) gasoline fired air compressor, identified as NS-AC-2, rated at 10 hp, and exhausting at one (1) stack identified as S/V 85; and
  - (r) one (1) gasoline engine powered high-pressure washer, identified as NS-PW-1, rated at 16 hp, exhausting at one (1) stack identified as S/V 86.
- (The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emissions Limitations and Standards [326 IAC 2-8-4(1)]

#### D.10.1 Sulfur Dioxide, Volatile Organic Compounds, Carbon Monoxide and Nitrogen Oxides

Operation of the three (3) gasoline generators, three (3) gasoline engine powered welders, one (1) air compressor and one (1) gasoline engine powered washer shall not exceed 360 hours per twelve (12) consecutive months each and operation of the sixteen (16) internal combustion engines shall not exceed 180 hours per twelve (12) consecutive months each. The total for each month shall not exceed the difference between the annual limit minus the sum of actual hours of operation from the previous eleven (11) months. Compliance is based on the total hours of operation during the previous 12 months. During the first 12 months of operation under this permit, the hours of operation shall be limited such that the total hours used divided by the accumulated months of operation shall not exceed 30 hours per month for the gasoline generator and 15 hours per month for each of the sixteen (16) internal combustion engines. These operating limits shall limit total SO<sub>2</sub>, VOC, CO and NO<sub>x</sub> emissions from the gasoline generator and the sixteen (16) internal combustion engines to 0.03, 9.64, 1.01 and 0.43 tons per twelve (12) month period rolled on a monthly basis, respectively (emissions are calculated by using the emission factors for generators and IC engines provided in Chapter 3 of the most recent edition of USEPA's AP-42). Therefore, the requirements of 326 IAC 2-7 do not apply.

## **Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]**

### **D.10.2 Hours of Gasoline Generator and IC Engine**

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The Permittee shall maintain records at the source of the hours of operation for the three (3) gasoline generators, three (3) gasoline engine powered welders, one (1) air compressor and one (1) gasoline engine powered washer and the sixteen (16) internal combustion engines. The records shall be complete and sufficient to establish compliance with the hours of usage limits and/or CO and NOx emission limits established in this permit. The records shall contain a minimum of the following:

- (a) The hours of operation for each month of the gasoline generator and the sixteen (16) internal combustion engines usage; and
- (b) The 12 month rolling total of hours of operation for each of the gasoline generator and the sixteen (16) internal combustion engines.

### **D.10.3 Quarterly Reporting**

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A quarterly summary to document compliance with operation condition number D.10.1 shall be submitted, to the address listed in Section C.19 - General Reporting Requirements, using the enclosed forms or their equivalent, within thirty (30) days after the end of the calendar quarter being reported.



## FESOP Quarterly Report

Source Name: Newport Chemical Depot  
Source Address: Indiana State Road 63, Newport, Indiana 47966-0160  
Mailing Address: P. O. Box 160, Newport, Indiana 47966-0160  
FESOP No.: F165-5470-00003  
Facility: The gasoline generator in Building 718A, generators NS-GN-4,5, welders NS-WEL-2,3,4, air compressor NS-AC-2, washer NS-PW-1, and the sixteen (16) internal combustion engines in Buildings 710, 717A, 718A, 725A and 733K  
Parameter: SO<sub>2</sub>, VOC, CO and NOx  
Limit: 360 hours of operation per twelve (12) month period for the gasoline generators, welders, air compressor, and washer, 180 hours of operation per twelve (12) month period for the sixteen (16) internal combustion engines.

YEAR: \_\_\_\_\_

Bldg.	Unit ID.	Month: _____			Month: _____			Month: _____		
		Hour of Op. this month	Hour of Op. Prev. 11 months	Hour of Op. 12 mon. tot	Hour of Op. this month	Hour of Op. Prev. 11 months	Hour of Op. 12 mon. tot	Hour of Op. this month	Hour of Op. Prev. 11 months	Hour of Op. 12 mon. tot
718A	Gas. Gen.(5 kW)									
	NS-GN-4									
	NS-GN-5									
	NS-WEL-2									
	NS-WEL-3									
	NS-WEL-4									
	NS-AC-2									
	NS-PW-1									
733K	20 hp pump-#1									
733K	20 hp pump-#2									
733K	20 hp pump-#3									
717A	20 hp pump									
718A	20 hp pump									
718A	12 hp pump									
717A	10 hp pump									
718A	8 hp pump									
710	7.5 hp pump									
725A	3 hp pump									
718A	5.5 hp maint. unit									
718A	20 hp maint. unit									
718A	10 hp maint. unit									
725A	65 hp maint. unit									
725A	55 hp maint. unit									

9 No deviation occurred in this month.  
9 Deviation/s occurred in this month.  
Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_  
Title/Position: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_

**Indiana Department of Environmental Management  
Office of Air Management**

Addendum to the  
Technical Support Document for a Significant Permit Revisions to a  
Federally Enforceable State Operating Permit (FESOP)

<b>Source Name:</b>	<b>Newport Chemical Depot</b>
<b>Source Location:</b>	<b>Indiana State Road 63, Newport, Indiana 47966-0160</b>
<b>SIC Code:</b>	<b>9711</b>
<b>County:</b>	<b>Vermillion</b>
<b>Operation Permit No.:</b>	<b>F165-5470-00003</b>
<b>Significant Rev. No.:</b>	<b>Significant FESOP Revision 165-11541-00003</b>
<b>Permit Reviewer:</b>	<b>Scott Pan/EVP</b>

On May 12, 2000, the Office of Air Management (OAM) had a notice published in the Daily Clintonian, Clinton, Indiana, stating that Newport Chemical Depot had applied for a significant revision to a Federally Enforceable State Operating Permit (FESOP) to add additional combustion units. The notice also stated that OAM proposed to issue a significant permit revision to a FESOP for this operation and provided information on how the public could review the proposed significant permit revision to a FESOP and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this significant permit revision to a FESOP should be issued as proposed.

On May 18, 2000 Newport Chemical Depot submitted comments on the proposed FESOP revision. The summary of the comments and corresponding responses is as follows:

**Comment #1:**

Newport Chemical Depot requested that one (1) 550-gallon and one (1) 300-gallon aboveground diesel fuel tanks, be added to the proposed revision. The two tanks have potential VOC emissions of 0.0004 and 0.0002 tons per year, respectively.

**Response #1:**

The two tanks are not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.110, Subpart K; 40 CFR Part 60.110a, Subpart Ka; and 40 CFR Part 60.110b, Subpart Kb) "Standards of Performance for Volatile Organic Liquid Storage Vessels" since both tanks have a storage capacity of less than 40 cubic meters. OAM also determined, based on the tank capacities and emissions, that these two tanks will not affect the proposed FESOP limits and can be considered to be insignificant activities, as defined in 326 IAC 2-7-1(21). Therefore, these two tanks are to be added in Section A.3 (Insignificant Activities) as follows:

(ff)     **two (2) aboveground diesel fuel tanks, each with a storage capacity of 550 gallons and 300 gallons, respectively.**

**Indiana Department of Environmental Management  
Office of Air Management**

**Technical Support Document (TSD) for a Permit Revision to a Federally  
Enforceable State Operating Permit (FESOP)**

**Source Background and Description**

<b>Source Name:</b>	Newport Chemical Depot
<b>Source Location:</b>	Indiana State Road 63, Newport, Indiana, 47966-0160
<b>County:</b>	Vermillion
<b>SIC Code:</b>	9711
<b>Operation Permit No.:</b>	F165-5470-00003
<b>Operation Permit Issuance Date:</b>	December 11, 1996
<b>Significant Revision No.:</b>	165-11541-00003
<b>Permit Reviewer:</b>	Scott Pan/EVP

The Office of Air Management (OAM) has reviewed applications from Newport Chemical Depot relating to the addition of various power generating and combustion units to the existing source.

**History**

On November 12, 2000, Newport Chemical Depot submitted an application to the OAM requesting to add additional combustion units to their existing plant. Newport Chemical Depot was issued a FESOP (F165-5470-00003) on December 11, 1996.

**Existing Approvals**

The source was issued a FESOP (F165-5470-00003) on December 11, 1996. The source has since received the following:

- (a) First Significant Revision to the existing FESOP source, 165-9701-00003, issued on October 7, 1998.
- (b) First Minor Revision to the existing FESOP source, 165-10289-00003, issued on April 23, 1999.
- (c) Second Significant Revision to the existing FESOP source, 165-9659-00003, issued on December 3, 1999.

**Unpermitted Emission Units and Pollution Control Equipment**

The application includes the following unpermitted facilities/units:

- (a) two (2) gasoline fired generators, identified as NS-GN-4 and NS-GN-5, each rated at 20 horsepower (hp), and each exhausting at one (1) stack, identified as S/V 80 and S/V 81, respectively;

- (b) three (3) gasoline engine powered welders, identified as NS-WEL-1, NS-WEL-2 and NS-WEL-3, each rated at 13 hp, 16 hp and 11 hp, respectively, and each exhausting at one (1) stack identified as S/V 82, S/V 83 and S/V 84, respectively;
- (c) one (1) gasoline fired air compressor, identified as NS-AC-2, rated at 10 hp, and exhausting at one (1) stack identified as S/V 85; and
- (d) one (1) gasoline engine powered high-pressure washer, identified as NS-PW-1, rated at 16 hp, exhausting at one (1) stack identified as S/V 86.

### **New Emission Units and Pollution Control Equipment Receiving Prior Approval**

There are no new facilities included in this review process.

### **Insignificant Activities**

This application also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) one (1) diesel fired heater, rated at 0.406 million British thermal units (MMBtu) per hour, exhausting at one (1) stack, identified as S/V 87;
- (b) four (4) portable kerosene heaters, each rated at 0.189, 0.189, 0.149 and 0.162 MMBtu/hr, respectively, and each exhausting at one (1) stack, identified as S/V 88, S/V 89, S/V 90 and S/V 91, respectively; and
- (c) three (3) propane heaters, each rated at 0.028, 0.095 and 0.095 MMBtu/hr, respectively, and each exhausting at one (1) stack, identified as S/V 92, S/V 93 and S/V 94, respectively.

### **Enforcement Issue**

- (a) IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled *Unpermitted Emission Units and Pollution Control Equipment*.
- (b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

### **Recommendation**

The staff recommends to the Commissioner that the Significant Permit Revision be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on November 12, 1999.

### **Emission Calculations**

See Appendix A of this document for detailed emissions calculations (pages 1 through 5.)

## Potential To Emit of Revision

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

This table reflects the PTE before controls for the equipment covered under this revision. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	0.4
PM-10	0.4
SO <sub>2</sub>	2.0
VOC	10.0
CO	204.0
NO <sub>x</sub>	6.0

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
Benzene	less than 10
Ethylbenzene	less than 10
Formaldehyde	less than 10
Toluene	less than 10
Xylenes	less than 10
1,3-Butadiene	less than 10
Acetaldehyde	less than 10
Acrolein	less than 10
POM	less than 10
Arsenic	less than 10
Beryllium	less than 10
Cadmium	less than 10
Chromium	less than 10
Lead	less than 10
Mercury	less than 10
Magnanese	less than 10
Nickel	less than 10
Selenium	less than 10
TOTAL	less than 25

- (a) The potential emissions before control of CO are greater than twenty-five (25) tons per year. Therefore, pursuant to 326 IAC IAC 2-8-12, a Significant Revision to the FESOP is required.

## Limited Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units at the source:

	Limited PTE (tons/yr)						
Process/facility	PM	PM-10	SO2	VOC	CO	NOx	HAPs
<b>Equipment covered under this application</b>							
Gasoline powered units	0.01	0.01	0.01	0.41	8.38	0.21	0.00
Insignificant Activities	0.07	0.07	1.68	0.01	0.19	0.85	0.00
<b>Previously permitted units</b>							
Stationary Internal Combustion Engines	1.33	1.33	1.28	1.74	8.40	18.90	0.002
Building 7700 Boiler	0.16	0.08	3.32	0.03	0.39	1.56	0.00
Toxic Monitoring Lab Incinerator	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile Abrasive Blaster	25.81	7.04	0.00	0.00	0.00	0.00	0.00
Woodworking Shop	20.47	8.19	0.00	0.00	0.00	0.00	0.00
Surface Coating	8.68	8.68	0.00	14.77	0.00	0.00	8.88
Gasoline Dispensing Tank	0.00	0.00	0.00	8.91	0.00	0.00	4.41
Cold Cleaning Degreasers	0.00	0.00	0.00	2.32	0.00	0.00	0.00
Toxic Monitoring Lab	0.00	0.00	0.00	0.03	0.00	0.00	0.00
Seven (7) Petroleum Storage Tanks	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Insignificant Activities	0.65	0.65	0.02	0.18	0.73	3.40	0.0295
Trivial Activities	0.86	0.25	0.00	2.18	0.00	0.00	0.00
Non-Stock Pile Activities	0.52	0.52	0.59	1.01	10.42	7.37	0.00
Boiler 2401	1.92	1.92	3.85	1.92	30.76	13.46	0.00
SDG A/B	0.86	0.86	5.00	0.79	5.50	16.14	0.00
SDG ECF	0.19	0.19	0.18	0.22	0.59	2.74	0.00
TCC Operation, Drained Agent Reactors, Hydrolysate and Other Tanks	0.00	0.00	0.00	1.36	0.00	0.00	0.00
SCWO Reactor	0.00	0.00	13.97	0.01	1.93	4.78	0.00
Gasoline Generator in Bldg. 718A	0.00	0.00	0.00	0.03	0.53	0.01	0.00
11 pumps (IC engines)	0.01	0.01	0.01	6.00	0.29	0.15	0.00
5 maintenance units (IC engines)	0.02	0.02	0.02	3.61	0.19	0.27	0.00
Insignificant Activities	0.10	0.10	0.09	0.29	0.11	1.36	0.00
<b>Total Emissions **</b>	<b>61.67</b>	<b>29.93</b>	<b>30.02</b>	<b>46.54</b>	<b>68.42</b>	<b>71.39</b>	<b>13.99</b>

\*\* Total emissions represent the combined PTE for existing facilities (without changing any existing limit or condition) and the facilities covered under this approval.

## County Attainment Status

The source is located in Vermillion County.

Pollutant	Status
PM-10	Unclassifiable
SO <sub>2</sub>	Attainment
NO <sub>2</sub>	Attainment
Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>) are precursors for the formation of ozone. Therefore, VOC and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to the ozone standards. Vermillion County has been designated as attainment or unclassifiable for ozone.

## Federal Rule Applicability

There are no changes in Federal rule applicability from the original FESOP.

## State Rule Applicability

### 326 IAC 2-8-4 (FESOP)

This source is subject to 326 IAC 2-8-4 (FESOP). Pursuant to this rule, the operation of each of the gasoline powered units covered under this approval is limited to 360 hours per twelve (12) consecutive month period, rolled on a monthly basis. The limit will assure source wide CO emissions be limited to less than 100 tons per year after the revision. Therefore, the requirements of 326 IAC 2-7 will not apply.

There are no applicable Article 8 rules due to the VOC emissions from the facilities covered under this approval. There are no changes in State rule applicability from the original FESOP.

## Compliance Monitoring

There are no changes in Compliance Monitoring from the original FESOP.

## Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

- (a) This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments.
- (b) See attached calculations for detailed air toxic calculations. (Page 1 of TSD App. A)

### **Proposed Changes to Federally Enforceable State Operating Permit**

The following changes were made as the Third Significant Revision for this source (~~strikeout~~ added to show what was deleted and **bold** added to show what was added):

- (II) Section A.2 "Emission Units and Pollution Control Summary" has been changed to list the equipment covered under this proposed FESOP revision, as follows:
  - (o) **two (2) gasoline fired generators, identified as NS-GN-4 and NS-GN-5, each rated at 20 horsepower (hp), and each exhausting at one (1) stack, identified as S/V 80 and S/V 81, respectively;**
  - (p) **three (3) gasoline engine powered welders, identified as NS-WEL-1, NS-WEL-2 and NS-WEL-3, each rated at 13 hp, 16 hp and 11 hp, respectively, and each exhausting at one (1) stack identified as S/V 82, S/V 83 and S/V 84, respectively;**
  - (q) **one (1) gasoline fired air compressor, identified as NS-AC-2, rated at 10 hp, and exhausting at one (1) stack identified as S/V 85; and**
  - (r) **one (1) gasoline engine powered high-pressure washer, identified as NS-PW-1, rated at 16 hp, exhausting at one (1) stack identified as S/V 86.**
- (II) The following activities has been added to the Condition A.3 "Insignificant Activities" :
  - (cc) **one (1) diesel fired heater, rated at 0.406 million British thermal units (MMBtu) per hour, exhausting at one (1) stack, identified as S/V 87;**
  - (dd) **four (4) portable kerosene heaters, each rated at 0.189, 0.189, 0.149 and 0.162 MMBtu/hr, respectively, and each exhausting at one (1) stack, identified as S/V 88, S/V 89, S/V 90 and S/V 91, respectively; and**
  - (ee) **three (3) propane heaters, each rated at 0.028, 0.095 and 0.095 MMBtu/hr, respectively, and each exhausting at one (1) stack, identified as S/V 92, S/V 93 and S/V 94, respectively.**
- (III) Section D.10 was revised as follows:



## SECTION D.10 FACILITY OPERATION CONDITIONS

- (l) One (1) non-emergency type gasoline generator, located in Building 718A and rated at 5 kilowatts (kW):
  - (m) Eleven (11) gasoline pumps (internal combustion engines):
    - (1) three (3) pumps, located in Building 733K and each rated at 20 horsepower (HP);
    - (2) one (1) pump, located in Building 717A and rated at 20 HP;
    - (3) one (1) pump, located in Building 718A and rated at 20 HP;
    - (4) one (1) pump, located in Building 718A and rated at 12 HP;
    - (5) one (1) pump, located in Building 717A and rated at 10 HP;
    - (6) two (2) pumps, located in Building 718A and each rated at 8 HP;
    - (7) one (1) pump, located in Building 710 and rated at 7.5 HP; and
    - (8) one (1) pump, located in Building 725A and rated at 3 HP;
  - (n) Five (5) maintenance units (internal combustion engines):
    - (1) three (3) gasoline fired engines, located in Building 718A and each rated at 5.5, 20 and 10 HP, respectively;
    - (2) one (1) diesel fired engine, located in Building 725A and rated at 65 HP; and
    - (3) one (1) gasoline fired engine, located in Building 725A and rated at 55 HP.
  - (o) **two (2) gasoline fired generators, identified as NS-GN-4 and NS-GN-5, each rated at 20 horsepower (hp), and each exhausting at one (1) stack, identified as S/V 80 and S/V 81, respectively;**
  - (p) **three (3) gasoline engine powered welders, identified as NS-WEL-1, NS-WEL-2 and NS-WEL-3, each rated at 13 hp, 16 hp and 11 hp, respectively, and each exhausting at one (1) stack identified as S/V 82, S/V 83 and S/V 84, respectively;**
  - (q) **one (1) gasoline fired air compressor, identified as NS-AC-2, rated at 10 hp, and exhausting at one (1) stack identified as S/V 85; and**
  - (r) **one (1) gasoline engine powered high-pressure washer, identified as NS-PW-1, rated at 16 hp, exhausting at one (1) stack identified as S/V 86.**
- (The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)**

### Emissions Limitations and Standards [326 IAC 2-8-4(1)]

#### D.10.1 Sulfur Dioxide, Volatile Organic Compounds, Carbon Monoxide and Nitrogen Oxides

Operation of the **three (3) gasoline generators, three (3) gasoline engine powered welders, one (1) air compressor and one (1) gasoline engine powered washer** shall not exceed 360 hours per twelve (12) consecutive months **each** and operation of the sixteen (16) internal combustion engines shall not exceed 180 hours per twelve (12) consecutive months each. The total for each month shall not exceed the difference between the annual limit minus the sum of actual hours of operation from the previous eleven (11) months. Compliance is based on the total hours of operation during the previous 12 months. During the first 12 months of operation under this permit, the hours of operation shall be limited such that the total hours used divided by the accumulated months of operation shall not exceed 30 hours per month for the gasoline generator and 15 hours per month for each of the sixteen (16) internal combustion engines. These operating limits shall limit total SO<sub>2</sub>, VOC, CO and NO<sub>x</sub> emissions from the gasoline generator and the sixteen (16) internal combustion engines to 0.03, 9.64, 1.01 and 0.43 tons per twelve (12) month period rolled on a monthly basis, respectively (emissions are calculated by using the emission factors for generators and IC engines provided in Chapter 3 of the most recent edition of USEPA's AP-42). Therefore, the requirements of 326 IAC 2-7 do not apply.

## **Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]**

### **D.10.2 Hours of Gasoline Generator and IC Engine**

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The Permittee shall maintain records at the source of the hours of operation for the **three (3) gasoline generators, three (3) gasoline engine powered welders, one (1) air compressor and one (1) gasoline engine powered washer** and the sixteen (16) internal combustion engines. The records shall be complete and sufficient to establish compliance with the hours of usage limits and/or SO<sub>2</sub>, VOC, CO and NOx emission limits established in this permit. The records shall contain a minimum of the following:

- (a) The hours of operation for each month of the gasoline generator and the sixteen (16) internal combustion engines usage; and
- (b) The 12 month rolling total of hours of operation for each of the gasoline generator and the sixteen (16) internal combustion engines.

### **D.10.3 Quarterly Reporting**

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A quarterly summary to document compliance with operation condition number D.10.1 shall be submitted, to the address listed in Section C.19 - General Reporting Requirements, using the enclosed forms or their equivalent, within thirty (30) days after the end of the calendar quarter being reported.

- (IV) The following quarterly report has been revised to include the recording of the hours of operation for the gasoline powered units covered under this application, as follows:

## FESOP Quarterly Report

Source Name: Newport Chemical Depot  
Source Address: Indiana State Road 63, Newport, Indiana 47966-0160  
Mailing Address: P. O. Box 160, Newport, Indiana 47966-0160  
FESOP No.: F165-5470-00003  
Facility: The gasoline generator in Building 718A, **generators NS-GN-4,5, welders NS-WEL-2,3,4, air compressor NS-AC-2, washer NS-PW-1**, and the sixteen (16) internal combustion engines in Buildings 710, 717A, 718A, 725A and 733K  
Parameter: SO<sub>2</sub>, VOC, CO and NOx  
Limit: 360 hours of operation per twelve (12) month period for the gasoline generators, **welders, air compressor, and washer**, 180 hours of operation per twelve (12) month period for the sixteen (16) internal combustion engines.

YEAR: \_\_\_\_\_

Bldg.	Unit ID.	Month: _____			Month: _____			Month: _____		
		Hour of Op. this month	Hour of Op. Prev. 11 months	Hour of Op. 12 mon. tot	Hour of Op. this month	Hour of Op. Prev. 11 months	Hour of Op. 12 mon. tot	Hour of Op. this month	Hour of Op. Prev. 11 months	Hour of Op. 12 mon. tot
718A	Gas. Gen.(5 kW)									
	<b>NS-GN-4</b>									
	<b>NS-GN-5</b>									
	<b>NS-WEL-2</b>									
	<b>NS-WEL-3</b>									
	<b>NS-WEL-4</b>									
	<b>NS-AC-2</b>									
	<b>NS-PW-1</b>									
733K	20 hp pump-#1									
733K	20 hp pump-#2									
733K	20 hp pump-#3									
717A	20 hp pump									
718A	20 hp pump									
718A	12 hp pump									
717A	10 hp pump									
718A	8 hp pump									
710	7.5 hp pump									
725A	3 hp pump									
718A	5.5 hp maint. unit									
718A	20 hp maint. unit									
718A	10 hp maint. unit									
725A	65 hp maint. unit									
725A	55 hp maint. unit									

9 No deviation occurred in this month.  
9 Deviation/s occurred in this month.  
Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_  
Title/Position: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_

## **Conclusion**

The revision of this National Defense - Chemical Stockpile Storage site shall be subject to the conditions of the attached proposed **Significant FESOP Revision No. SMF165-11541-00003**.

### EMISSION SUMMARY

**Company Name:** Newport Chemical Depot  
**Address City IN Zip:** Indiana State Road 63, Newport, Indiana 47966-0160  
**Permit #:** SFR 165-11541  
**Plt ID:** 165-00003  
**Reviewer:** Scott Pan/ENV  
**Date:** March 20, 2000

#### Potential Emissions (tons/year)

##### Emissions Generating Activity

Pollutant	Gasoline Powered Units	Diesel Powered Units (Insig. Act.)	Kerosene Heaters Units (Insig. Act.)	Propane Heaters Units (Insig. Act.)	Total
VOC	10.0	0.0	0.0	0.0	10.0
PM	0.3	0.0	0.0	0.0	0.4
PM10	0.3	0.0	0.0	0.0	0.4
NOx	5.1	0.3	0.5	0.1	6.0
SO2	0.3	0.1	1.6	0.0	2.0
CO	203.8	0.1	0.1	0.0	204.0
Single HAP	Negligible	Negligible	Negligible	Negligible	Negligible
Total HAP	Negligible	Negligible	Negligible	Negligible	Negligible

Total emissions based on rated capacity at 8760 hours.

#### Limited Potential to Emit (tons/year)

##### Emissions Generating Activity

Pollutant	Gasoline Powered Units (1)	Diesel Powered Units (Insig. Act.)	Kerosene Heaters Units (Insig. Act.)	Propane Heaters Units (Insig. Act.)	Total
VOC	0.4	0.0	0.0	0.0	0.4
PM	0.0	0.0	0.0	0.0	0.1
PM10	0.0	0.0	0.0	0.0	0.1
NOx	0.2	0.3	0.5	0.1	1.1
SO2	0.0	0.1	1.6	0.0	1.7
CO	8.4	0.1	0.1	0.0	8.6
Single HAP	Negligible	Negligible	Negligible	Negligible	Negligible
Total HAP	Negligible	Negligible	Negligible	Negligible	Negligible

(1) Operation of gasoline powered units are limited to 360 hours per year each to be in compliance with the requirements of 326 IAC 2-8.

**Appendix A: Potential Emissions Calculations**  
**Gasoline Fired Generators**  
**Criteria Pollutants**

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**Company Name:** Newport Chemical Depot  
**Address, City IN Zip:** Indiana State Road 63, Newport, Indiana 47966-0160  
**CP:** SFR 165-11541  
**Plt ID:** 165-00003  
**Reviewer:** Scott Pan/ENV  
**Date:** March 20, 2000

Equipment Capacity  
hp

Potential Throughput  
hp-hr/year

106

928560

2\*20hp + 13hp + 2\*16hp + 11hp + 10hp

Emission Factor in lb/hp-hr	Pollutant					
	PM	PM-10	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO
	7.21E-04	7.21E-04	5.91E-04	0.011	2.16E-02	0.439
Potential Emission in tons/yr	0.3	0.3	0.3	5.1	10.0	203.8
Limited Emission in tons/yr (Based on 360 hr/yr)	0.01	0.01	0.01	0.21	0.41	8.38

**Methodology**

Emission Factors were obtained from AP-42, 5th edition, Table 3.3-1.

Potential Emissions (ton/yr) = Equipment Capacity (hp) x 8,760 hrs/yr x Emission Factor (lb/hp-hr) x (1/2000) (ton/lb)

## Appendix A: Potential Emissions Calculations

Page 3 of 5 TSD App A

### Diesel Washer Criteria Pollutants

**Company Name:** Newport Chemical Depot  
**Address, City IN Zip:** Indiana State Road 63, Newport, Indiana 47966-0160  
**CP:** SFR 165-11541  
**Plt ID:** 165-00003  
**Reviewer:** Scott Pan/ENV  
**Date:** March 20, 2000

Rated Input Capacity  
gal/hr

Potential Throughput  
1000 gal/year

2.96

25.93

	Pollutant					
	PM	PM-10	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO
Emission Factor in lb/1000 gal	2.00	2.00	7.10	20.00	0.34	5.00
Potential Emission in tons/yr	0.03	0.03	0.09	0.26	0.00	0.06

### Methodology

Emission Factors were obtained from AP-42, 5th edition, Table 1.3-1.

Potential Emissions (ton/yr) = Equipment Capacity (1000 gal/hr) x 8,760 hrs/yr x Emission Factor (lb/1000 gal) x (1/2000) (ton/lb)

## Appendix A: Potential Emissions Calculations

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### Kerosene Heaters

### Criteria Pollutants

**Company Name:** Newport Chemical Depot  
**Address, City IN Zip:** Indiana State Road 63, Newport, Indiana 47966-0160  
**CP:** SFR 165-11541  
**Plt ID:** 165-00003  
**Reviewer:** Scott Pan/ENV  
**Date:** March 20, 2000

Rated Input Capacity  
gal/hr

Potential Throughput  
1000 gal/yr

5.1

44.676

Emission Factor in lb/hp-hr	Pollutant					
	PM 2.00	PM-10 2.00	SO2 71.00	NOx 20.00	VOC 0.34	CO 5.00
Potential Emission in tons/yr	0.04	0.04	1.59	0.45	0.01	0.11

### Methodology

Emission Factors were obtained from AP-42, 5th edition, Table 3.3-1.

Potential Emissions (ton/yr) = Equipment Capacity (1000 gal/hr) x 8,760 hrs/yr x Emission Factor (lb/1000 gal) x (1/2000) (ton/lb)



## Appendix A: Potential Emissions Calculations

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### Propane Heaters

### Criteria Pollutants

**Company Name:** Newport Chemical Depot  
**Address, City IN Zip:** Indiana State Road 63, Newport, Indiana 47966-0160  
**CP:** SFR 165-11541  
**Plt ID:** 165-00003  
**Reviewer:** Scott Pan/ENV  
**Date:** March 20, 2000

Rated Input Capacity  
gal/hr

Potential Throughput  
1000 gal/yr

2.32

20.32

Emission Factor in lb/hp-hr	Pollutant					
	PM 0.40	PM-10 0.40	SO2 0.00	NOx 14.00	VOC 0.30	CO 1.90
Potential Emission in tons/yr	0.00	0.00	0.00	0.14	0.00	0.02

### Methodology

Emission Factors were obtained from AP-42, 5th edition, Table 1.5-1.

Potential Emissions (ton/yr) = Equipment Capacity (1000 gal/hr) x 8,760 hrs/yr x Emission Factor (lb/1000 gal) x (1/2000) (ton/lb)